









"It's my feeling that you give somebody a good place to live... it will just change their lives forever."

Resident of Enterprise Green Communities property **Imagine a world** where housing for low and moderate income people was not only abundant, but also healthy, safe, durable, comfortable, efficient, resilient, beautifully designed, and environmentally responsible.

And imagine that these exemplary homes are not just demonstrations of excellence, but the standard manner of designing, building, and operating high quality affordable housing.

As a community of housing providers, we have an opportunity to make this vision our reality, addressing today's affordability challenges and the impacts of our changing climate.



Established in 2004, Enterprise Green Communities aligns affordable housing investment strategies with environmentally responsive building practices. We (re)define green for affordable housing, scale practices across the sector, work with policy makers to introduce and maintain standards, and develop the Criteria based on developer needs and concerns.











Certification with Enterprise Green Communities verifies that your project has been designed to meet the 2020 Criteria.

Submit a Prebuild application for review before construction begins and a Postbuild application after the project is complete.

Review how to submit your application in our online portal: http://www.enterprisecommunity. org/criteria

Healthy living environments with affordable utility expenses are possible, and are fundamental to resilient communities. The release of the 2020 Enterprise Green Communities Critieria marks the 15th Anniversary of Enterprise's commitment to well-designed affordable housing. The 2020 Criteria was developed to translate the collective expertise of leading housing and green building practitioners into a clear, cost-effective framework for all affordable housing types. It addresses five major themes: integrative design, resilience, path to zero energy, healthy living and water.

The 2020 Criteria will break new ground in the affordable housing and green building industy in three key ways:

- Seekers of EGC certification must complete the Project Priorities Survey, a critical step in the Integrative Design process, to understand and prioritize the resident experience.
- Project teams can choose the current level of certification, or pursue a new higher level of certification, **Enterprise Green Communities Plus,** that prioritizes deep energy reductions, critical for affordable housing in a changing climate.
- Affordable housing that certifies to Enterprise's Green Communities 2020 Criteria will also achieve WELL certification (TM).

For a developer for whom sustainability is brand new, our Criteria provides a clear roadmap for achieving holistic project performance. For a developer that aspires for the highest performance possible, our optional criteria provides a launching pad to explore cutting edge ideas. And for policy makers, the Criteria serves as a quality assurance tool designed specifically to ensure investment brings positive impact to affordable housing residents.

INTEGRATIVE DESIGN











2020 CRITERIA HIGHLIGHTS

- 1. Integrative Design
- 1.1 Project Priorities Survey
- 1.2 Charrettes & Coordination Meetings
- 1.3 Documentation
- 1.4 Construction Management

Whether it's resilience, water and energy conservation, or health outcomes, integrative design is the practice that ties everything together. We know that 70% of design decisions are made during the first 10% of a project. Buildings are increasingly complex systems, and involving residents, stakeholders, and professionals early in the process in an interdisciplinary fashion allows developers to design with intention towards the outcomes we want to see in our communities.

The 2020 Criteria restructures the integrative design process to ensure that collective priorities are established from the start and clearly communicated throughout design and construction. The new Project Priorities Survey consolidates several 2015 Integrative Design Criteria into a simple guide that establishes the context, population, and environmental considerations for the project, residents and community. The addition of 1.4 Construction Management ensures that the project team's collective priorities are elevated during the construction of the development.

"The 2020 Criteria: Integrative Design section is a demonstration of iterative, integrative process. In 2015, we set some bold goals for this section, and implemented a set of strategies to achieve it. For 2020, we looked at outcomes, reviewed and revised the goals, and listened to the feedback from users and stakeholders. The new criteria get to the heart of the matter; cleaner, more direct benefit for typical project delivery, with hopefully better outcome through greater participation." Alistair Jackson, 2020 Criteria Technical Working Group

PATH TO ZERO ENERGY











2020 CRITERIA HIGHLIGHTS

5. Energy Efficiency

- 5.2a Moving to Zero Energy: Additional Reductions in Energy Use
- 5.2b Moving to Zero Energy: Near Zero Certification
- 5.3a Moving to Zero Energy: PV/Solar Hot Water Ready
- 5.3b Moving to Zero Energy: Renewable Energy
- 5.4 Achieving Zero Energy
- 5.5a Moving to Zero Carbon: All-Electric Ready
- 5.5b Moving to Zero Carbon: All Electric

In the United States, residential and commercial buildings account for 40 percent of energy consumption and significantly contribute to our greenhouse gas emissions; concurrently, day-to-day stressors of our changing climate disproportionately affect vulnerable communities, including low-income and communities of color. The 2020 Criteria prioritizes the reduction of emissions by introducing new strategies and a new "Plus" level of certification to push investment in deep levels of energy efficiency, a critical mitigation strategy in our changing climate.

The 2020 Criteria contains the three essential strategies on the "path to zero energy," the path toward reducing emissions associated with a building: reducing a building's operating energy through energy efficiency practices, reducing a building's emissions through the type of energy source that fuels that operating energy, and reducing a building's emissions embodied in the materials that are used to construct the property. Criteria 5.1 and 5.2 address reducing operating energy needs, Criteria 5.3 and 5.5 address reducing emissions through the property's power sources, and Criterion, 5.4, combines the two concepts, directing projects toward Zero Energy of operations.

"Zero Energy Building (ZEB): An energy-efficient building where, on a source energy basis, the actual annual delivered energy is less than or equal to the on-site renewable exported energy." U.S. Department of Energy, A Common Definition for Zero Energy Buildings "High performance affordable housing requires both creative and painstaking integration of complex and sometimes even competing aspects of design and construction. Developing robust performance criteria is challenging; weaving synergies into a system of criteria is frankly remarkable. The 2020 Criteria is a landmark achievement for our industry." **Peter Yost, 2020 Criteria Technical Working Group**

HEALTHY LIVING











2020 CRITERIA HIGHLIGHTS

1. Integrative Design

1.5 Design for Health and Well-Being: Health Action Plan

6. Materials

- 6.1 Ingredient Transparency for Material Health
- 6.2 Recycled Content and Ingredient Transparency
- 6.3 Chemical Hazard Optimization
- 5.4 Healthier Material Selection

7. Healthy Living Environment

- 7.6 Smoke-Free Policy
- 7.8 Dehumidification
- 7.11 Active Design: Promoting Physical Activity
- 7.12 Beyond ADA: Universal Design
- 7.13 Healing-Centered Design

In the United States, it's common practice to detect and treat disease in medical settings. Yet the origins of illness can be identified long before someone enters a doctor's office. An estimated 70 percent of differences in health status are associated with people's social and physical environment, including the quality, affordability, stability and location of a person's home.

The new 2020 Criteria reflects the building sector's increasing focus on healthy environments. For the first time, common spaces in all certified projects will be smoke free. Additionally, project teams must commit to promoting health through design; they will select the most relevant for residents, either active design, Universal Design or healing-centered design. Lastly, the 2020 Criteria moves beyond reducing VOCs and incorporates new third-party verified labels, and standards into optional criteria, ultimately reducing residents' exposure to chemicals from building materials.

A healing centered approach to addressing trauma requires a different question that moves beyond "what happened to you" to "what's right with you" and views those exposed to trauma as agents in the creation of their own well-being rather than victims of traumatic events....The healing centered approach comes from the idea that people are not harmed in a vacuum, and well-being comes from participating in transforming the root causes of the harm within institutions. Healing centered engagement also advances the move to "strengths-based' care and away from the deficit based mental health models that drives therapeutic interventions." Shawn Ginwright, "The Future of Healing: Shifting from Trauma Informed Care to Healing Centered Engagement"











2020 CRITERIA HIGHLIGHTS

3. Site Improvement

- 3.4 Surface Stormwater Management
- 3.5 Surface Stormwater Management

4. Water

- 4.1 Water-Conserving Fixtures
- 4.2 Advanced Water Conservation
- 4.3 Water Quality

Water quality and conservation practices impact our health and well-being, property operating expenses, and a limited precious resource. The quality of drinking water in the U.S. is regulated tightly and, according to the American Association for the Advancement of Science, remarkably safe. However, lead pipes were banned in new systems in 1986, and yet, according to a study by the American Water Works Association, nearly a third of U.S. water systems still contained lead service lines in 2016. If green building standards rely on current regulations and push indoor water conservation, low flow fixtures may inadvertently degrade water quality if pipes are not "right-sized" and water ages in a system.

Enterprise Green communities has consistently required and incentivized water conservation, and the 2020 Criteria will allow teams flexibility in meeting those standards through a water calculator approach rather than with prescriptive fixture flow rates. And notably the 2020 Criteria is moving beyond a strict focus on conservation to address water quality with both mandatory and optional criteria. Lastly, 3.4 and 3.5 Stormwater Management have been updated to reflect new best practices in minimizing stormwater runoff and flooding — an important concern with more intense storms predicted in the future.

"Clean water from a faucet is an amazing and inexpensive resource that should not be taken for granted. Testing for lead and other contaminants will help confirm that water that is ready for people to use or determine if it requires additional treatment." Nathan Stodola, 2020 Criteria Technical Working Group

RESILIENCE











2020 CRITERIA HIGHLIGHTS

1. Integrative Design

- 1.1 Integrative Design: Project Priorities Survey
- 1.6 Multi-Hazard Risk/Vulnerability Assessment
- 1.7 Strengthening Cultural Resilience

3. Site Improvements

- 3.4 Surface Stormwater Management
- 3.5 Surface Stormwater Management

4. Water

4.7 Access to Potable Water During Emergencies

5. Energy Efficiency

- 5.4 Achieving Zero Energy
- 5.5a Moving to Zero Carbon: All-Electric Ready
- 5.5b Moving to Zero Carbon: All Electric
- 5.9 Resilient Energy Systems: Floodproofing
- 5.10 Resilient Energy Systems: Critical Loads

8. Operations and Maintenance

8.2 Emergency Management Manual

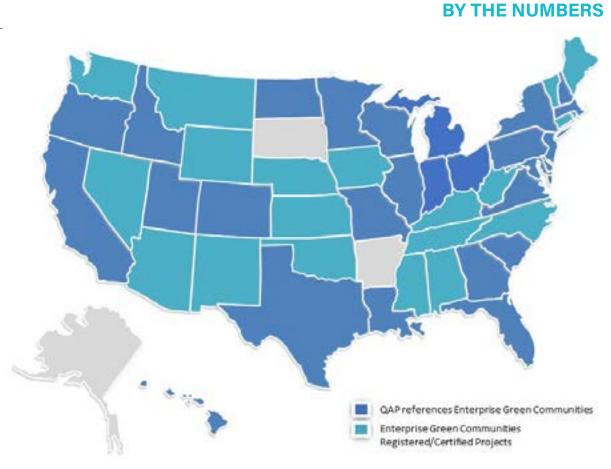
Enterprise believes resilience isn't just about being able to bounce back or rebuild after a disaster – it's about drawing from the inherent strength in communities and helping everyone prepare for and move forward in the face of our new climate future. Buildings that incorporate resilient features help ensure that communities are less disturbed by these disasters and are able respond more effectively. And when we build more resilient communities, we build a better future for everyone.

The 2020 Criteria maintains and improves existing resilience-focused criteria that prioritize habitability for affordable housing residents during and after a disaster. While it is vital for developers to invest in high quality resilient construction, it is also important to recognize and lift up the residents and their community's inherent resilience. Criterion 1.7 Strengthening Cultural Resilience is a new optional criterion that honors cultural identities, resident voices, and community histories - bringing their needs and benefits into sharp focus. Projects that incorporate this criterion will benefit from increased sense of shared ownership over public spaces, social accountability for upkeep and safety, and sense of belonging for residents.

"While it is vital that we tackle affordable housing challenges for American families, building cheap homes that will collapse in the face of any event, from minor flooding to historic is not the way to do it. All families deserve well-built homes they can afford, as well as the peace of mind that comes with knowing that their home can survive a natural disaster without bankrupting them." Marion Mollegen McFadden, Enterprise Community Partners, United States House of Representatives Hearing on Creating a Climate Resilient America: Smart Finance for Strong Communities

Since 2004, Enterprise Green Communities has:

- Defined, and re-defined, "green" for our sector by deploying the only national green building criteria and certification program designed exclusively for affordable housing. We've impacted more than 127,000 affordable homes in nearly every state in the country.
- Integrated green building standards into city, state, and federal policies. Today, there are 27 states that require or incentivize Enterprise Green Communities as part of their affordable housing finance, more so than any other green building program.
- Leveraged capital, investing more than \$3.9 billion in the development and preservation of green and affordable homes.
- Established hundreds of strong partnerships and collaborations with groups like yours —owners, developers, investors, builders, and experts in affordable housing development.



In addition to moving the needle on affordable housing, Enterprise continues to address the false choice between "affordable" or "sustainable," through research. A 2016 report by Southface and the Virginia Center for Housing Research¹, funded by Enterprise, found that green building puts money back in the pockets of developers, owners and families alike:

- Families in green developments save nearly \$8/month and \$96/year, and seniors save more than \$10 per month and \$122 per year more on energy costs when compared to non-green developments.
- Green developments in this study save nearly \$5,000 per year on owner-paid utility costs when compared to nongreen developments.
- While hard construction costs are 1.6% more expensive for green developments, they are nearly 5% less expensive on total construction costs per square foot and more than 13% less expensive on soft construction costs than the non-green developments.

TIMELINE + ACKNOWLEDGEMENTS



FOLLOW OUR NATIONAL TOUR: www.enterprisecommunity.org/green

For more information on training dates, contact us at: certification@enterprisecommunity.org

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And to the ever-growing network of affordable housing developers and project teams applying the Enterprise Green Communities Criteria acrossthe country, we applaud your commitment. This work is ever more important.

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